

CITY OF SACRAMENTO

Permit No: 0405829

1231 I Street, Sacramento, CA 95814

Insp Area: 1

Site Address: 1215 K ST SAC St: #2101

Thos Bros:

Parcel No: 006-0111-012

SUITE 2101 - 21ST FLOOR

Sub-Type: REM

Housing (Y/N): N

CONTRACTOR

ANTHONY & SONS
1790 TERMINAL ST.
WEST SACRAMENTO CA

OWNER

ESQUIRE PARTNERS L.L.C.
3100 ZINFANDEL DR #160
RANCHO CORDOVA, CA 95670

ARCHITECT

Nature of Work: INTERIOR REMODEL - INSTALL DEMISING WALLS TO SEPARATE TENANTS

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 360117 Date 4-15-04 Contractor Signature [Signature]

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 4-15-04 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

CC I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 713-02-000129004 Exp Date 10/01/2004

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with the provisions.

Date 4-15-04 Applicant Signature [Signature]

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

#0405829

Test and Balance Analysis Report

**Porter Novelli @ Esquire Plaza 21st floor
1215 'K' Street
Sacramento, CA**



FINAL AIR BALANCE CO., INC

License# 777985

CITY OF SACRAMENTO
NORTH PERMIT
CENTER

JUN 16 2004

RECEIVED



Certified 3222



Certified BB104006C

FINAL AIR BALANCE CO., INC
Testing & Balancing – Industrial & Environmental Systems
13020 Piper Hill Dr. Penn Valley, CA 95946
Ph: (530) 432-2226 Fax: (530) 432-2901

**TEST AND BALANCE ANALYSIS REPORT
FOR**

**Porter Novelli @ Esquire Plaza 21st floor
1215 'K' Street
Sacramento, CA**

Architect:

Engineer: **Frank M. Booth Design Build Co.
4220 Douglas Blvd.
Granite Bay, CA 95746
(916) 784-0777**

Contractor: **Frank M. Booth Design Build Co.
4220 Douglas Blvd
Granite Bay, CA 95746
(916) 784-0777**

This is to certify that Final Air Balance Co., Inc. has balanced the systems described herein to their optimum performance capabilities, unless otherwise noted in the project summary.

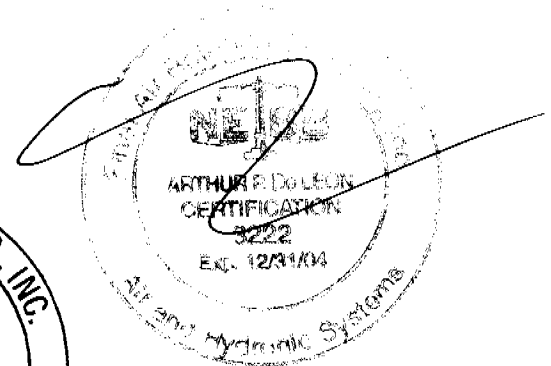
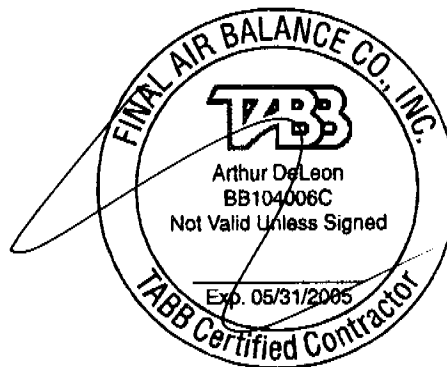
NEBB Certification: 3222

TABB Certification: BB104006C

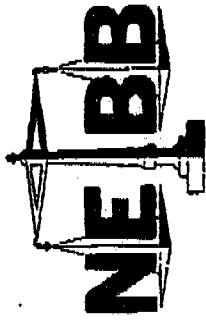
Date : 5/28/04

FAB Job Number: 0405J502

Approved : Art De Leon



Environmental Balancing Bureau



Certification

THIS IS TO CERTIFY THAT
Final Air Balance Company, Inc.
in Penn. Valley, CA

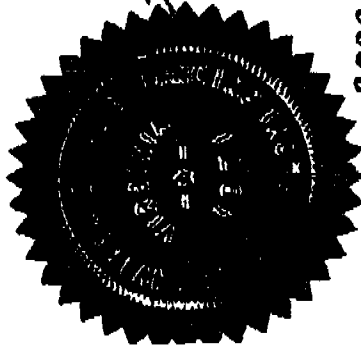
HAS MET ALL THE NEBB REQUIREMENTS TO

Perform and Manage

TESTING AND BALANCING, AND AGREES TO CONFORM TO

NEBB PROCEDURES AND STANDARDS FOR

Air and Hydronic Environmental Systems



2002-2004

Final Air Balance Company, Inc./CA

No. 3222

FOR THE BOARD OF DIRECTORS:

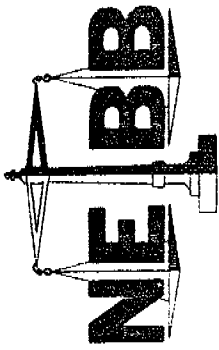
Karen M Bolton

PRESIDENT

Bob J. Spilkin

VICE-PRESIDENT

Environmental Balancing Bureau



Certificate of Qualification

THIS IS TO CERTIFY THAT

Arthur P. DeLeon

with Final Air Balance Company, Inc. in Penn Valley, CA

HAS QUALIFIED TO SUPERVISE ENVIRONMENTAL

TESTING AND BALANCING PROCEDURES FOR

Air and Hydronic Environmental Systems



2004

Final Air Balance Company, Inc./CA

FOR THE BOARD OF DIRECTORS:

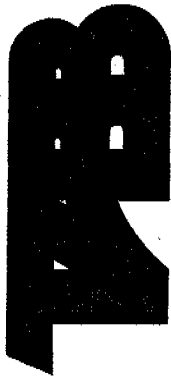
Red J. Arkin

PRESIDENT

James Bond

VICE-PRESIDENT

International Certification Board



TESTING, ADJUSTING AND BALANCING BUREAU

**CERTIFIED
SUPERVISOR**

Sheet Metal and Air Conditioning Industry

This certifies that

Arthur P. DeLeon

has completed the requirements of Certification as a
Testing, Adjusting and Balancing Supervisor

on

March 28, 2003

BB162002\$

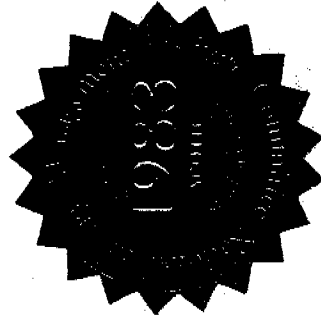
Certification #

March 28, 2003

Valid Date

March 31, 2005

Expiration Date



Roy Ringwood
Labor Co-Chairman

William Green
Management Co-Chairman

[Signature]
Administrator of TABB



FINAL AIR BALANCE CO., INC
Testing & Balancing – Industrial & Environmental Systems
13020 Piper Hill Dr. Penn Valley, CA 95946
Ph: (530) 432-2226 Fax: (530) 432-2901

Performance Guarantee

Pursuant to the agreement between

FINAL AIR BALANCE CO., INC.

And

Frank M. Booth Design Build Co.

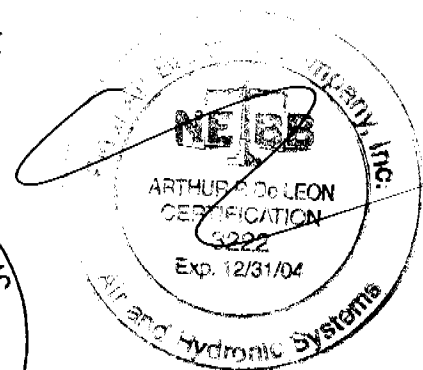
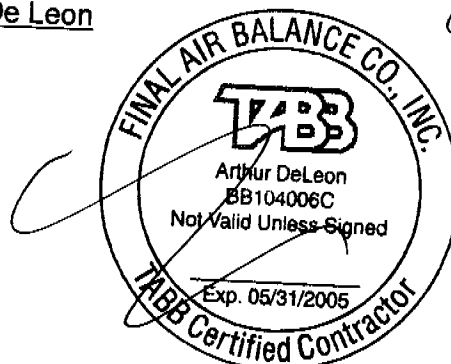
All systems shall be balanced in accordance with the plans and specifications and to the optimum performance capabilities of the equipment and design. Testing and balancing shall be done in accordance with the standards published by the National Environmental Balancing Bureau.

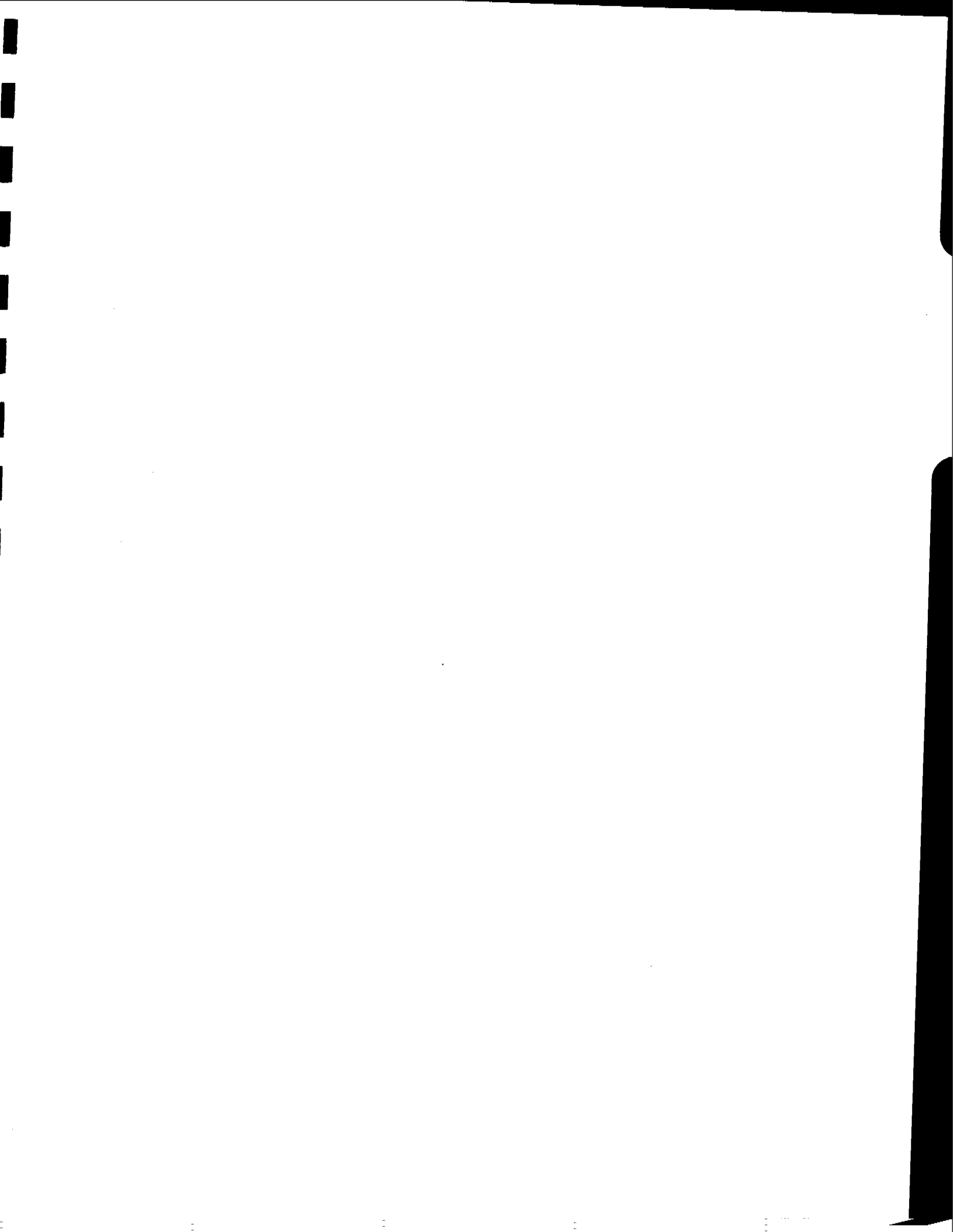
Air Balance performed by Final Air Balance Co., Inc. shall be guaranteed for one year. This applies to all equipment and air distribution per specifications on the Final Test & Analysis Report. Any problems will be investigated and corrected at no additional charge. This guarantee is void if the systems involved are changed in any way or adjusted by another person(s), facilities, or another air balance company.

Project Name Porter Novelli @ Esquire Plaza 21st floor

Date 5/28/04

By Arthur De Leon



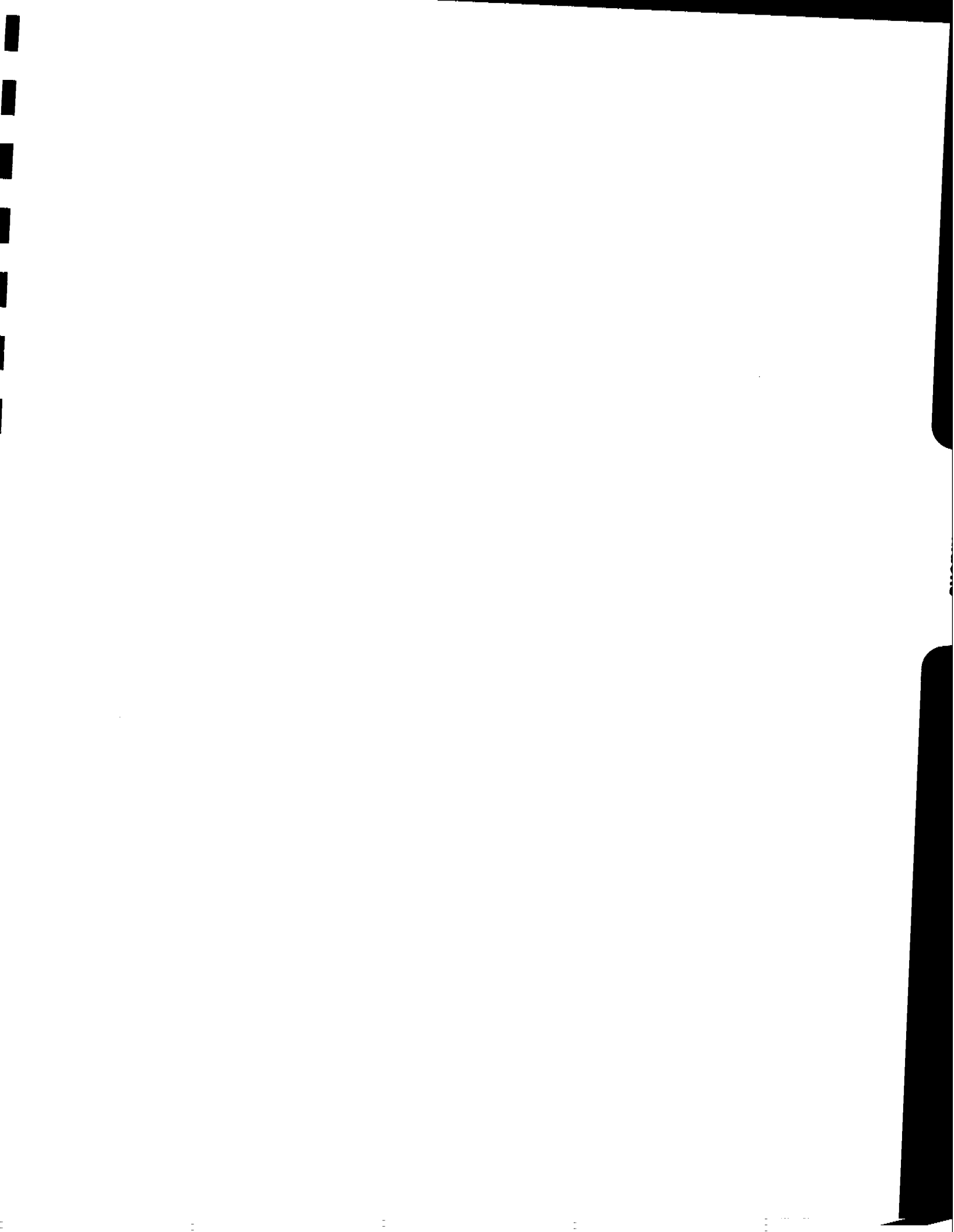


FINAL AIR BALANCE CO., INC
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TEST AND BALANCE INSTRUMENTATION

The following ***bold/italicized*** instruments were used to successfully measure and set each device on this project. These instruments meet the National Environmental Balancing Bureau's minimum guidelines for accuracy and calibration.

Instrument	Manufacturer	Model	Serial number	Calibration Date
<i>Air Data Multimeter</i>	<i>Shortridge</i>	<i>ADM860</i>	<i>M02540</i>	<i>12/23/03</i>
Air Data Multimeter	Shortridge	ADM870	M00755	8/28/03
Amp/Volt Meter – Digital	Fluke	36 AC/DC True RMS	78203626	11/26/02
Amp/Volt Meter - Digital	Fluke	36 AC/DC True RMS	78203394	1/06/04
Amp/Volt Meter - Digital	Fluke	336 AC/DC True RMS	80904943	12/23/03
Amp/Volt Meter - Analog	A.W. Sperry	SPR300	A-CG6659	1/15/03
Duct Leakage Test Kit with Oriface Tube 4"	McGill Airflow	LTK-SCA 2"	48608	N/A
Oriface Tube 4"		1 1/16"	2310-S 2861-S	12/23/02
Flow Hood - Analog	Alnor	6461	3845/1735	12/23/02
<i>Flow Hood - Digital</i>	<i>Shortridge</i>	<i>8400</i>	<i>M02540</i>	<i>12/23/03</i>
Flow Hood - Digital	Shortridge	8400	M00755	8/28/03
Hydronic Manometer	Alnor	HM650	393	12/23/03
Manometer - Digital	Dwyer	475-1	N45N / 3209	12/23/03
Pitot Tube	Dwyer	18"	-----	N/A
Pitot Tube	Dwyer	36"	-----	N/A
Pitot Tube	Dwyer	48"	-----	N/A
Pitot Tube	Dwyer	60"	-----	N/A
Pressure Gauge – Digital	PSI-Tronix	PG2000CG	3208	1/6/04
Pressure Gauge – Digital	PSI-Tronix	PG2000CG	8024652-1	12/23/03
Rotating Vane Ananometer	Davis	LCA 6000	060896	12/23/03
Sound Level Meter	Extech	407764	020620718	8/21/02
Sound Level Calibrator	Extech	407766	P879365	8/21/02
Tachometer - Digital	Monarch	Tach-100	1354512	12/23/03
Tachometer - Digital	Monarch	Tach-100	1354509	11/26/02
Tachometer - Digital	Monarch	Tach-100	1355785	12/23/03
Tachometer - Digital	Ametek	1726	112191088	1/15/03
Thermo Anemometer – Digital	Dwyer	471-3	N-210	12/23/03
Thermometer – Non contact	Raytek	RAYST20	2039480201-0001	1/6/04
Thermometer - Thermocouple	Fluke	51-II	80390110	12/23/03



Definitions of Abbreviations, Terminology, and Symbols

A	Nameplate Amps	FD	Fire Damper
AHU	Air Handling Unit	FG	Floor Grille
AC or ACU	Air Conditioner or Air Conditioning Unit	FLA	Full Load Amperage
ACCU	Air-Cooled Condensing Unit	FLEX	Flexible
ACH	Air Changes per Hour	FLTS	Filters
ACV	Automatic Control Valve	FPB	Fan Powered Box
AMB	Ambient	FPM	Feet Per Minute
AMP	Ampere	FR	Floor Register
AP	Access Point or Panel	FSD	Fire Smoke Damper
AVG	Average	FTU	Fan Terminal Unit
BAD	Bypass Air Damper	GA	Gauge
BHP	Brake Horsepower	GPM	Gallons per Minute
BTU	British Thermal Unit	HC	Heating Coil
BTUH	British Thermal Units per Hour	HD	Head pressure measured in inches or feet of water
CAV	Constant or Continuous Air Volume	Heater O.L.	Thermal Overload protection for motors located at the motor starter
CC	Cooling Coil	HEPA	High Efficiency Particulate Air Filter
CD	Ceiling Diffuser	HOA	Hand/Off/Auto switch
CFM	Cubic Feet per Minute	HP	Horsepower
CG	Ceiling Grille	HPS	High Pressure Steam
CH	Chiller	HRC	Heat Recovery or Reclaim Coil
CHWR	Chilled Water Return	HVAC	Heating, Ventilating & Air Conditioning
CHWS	Chilled Water Supply	HWR	Hot Water Return or Heating Water Return
COP	Coefficient of Performance	HWS	Hot Water Supply or Heating Water Supply
CP	Circulating Pump	HX	Heat Exchanger
CR	Ceiling Register	Hydronic	Indicates the use of conveyance of liquid for Thermal transfer
CT	Cooling Tower	ID	Inside Diameter
CU	Condensing Unit	IV	Inlet Vanes
CUH	Cabinet Unit Heating	K	Correction Factor
CV	Control Valve	LAT	Leaving Air Temperature
CWR	Condenser Water Return	LD	Linear Slot Diffuser
CW or CWS	Condenser Water Supply	LDB	Leaving Dry Bulb
DAT	Discharge Air Temperature	LPS	Low Pressure Steam
DB	Dry Bulb	LRA	Locked Rotor Ampere
DD	Direct Drive	LV	Leaving
DIA	Diameter	LWB	Leaving Wet Bulb
Delta	Difference, net decrease or increase	LWG	Low Wall Grille
DNA	Data Not Available	LWR	Low Wall Register
DNL	Data Not Listed	LWT	Leaving Water Temperature
E	Existing	MAU / MUA	Make-up Air Unit or Make-up Air
EA	Exhaust Air	MAX	Maximum
EAT	Entering Air Temperature	MBH	Thousand BTU's per Hour
Economizer	Controls and componentry that allow an air handler to logically utilize outdoor air for cooling as opposed to the use of mechanical cooling.	MIN	Minimum
EDB	Entering Dry Bulb	MVD	Manual Volume Damper
EDC	Electric Duct Coil	(N)	New
EDH	Electric Duct Heater	N/A	Not applicable
EF	Exhaust Fan	N/L	Not Listed
EG	Exhaust Grille	NIC	Not in contract
EMS	Energy management System(s)	OBD	Opposed Blade Damper
EMCS	Energy Management Control System(s)	OD	Outside Diameter
ENT	Entering	OSA or OA	Outside Air
ER	Exhaust Register	OAT	Outside Air Temperature
ESP	External Static Pressure	P	Circulating Pump
EWB	Entering Wet Bulb	PF	Power Factor
EWT	Entering Water Temperature	PH	Phase(s)
FCU	Fan Coil Unit	PRV	Pressure Relief Valve
FCV	Flow Control Valve		

PSI	Pounds per Square Inch
R	Return Air or Round (for sizes)
RA	Return Air
RAT	Return Air Temperature
REQ	Required
RF	Return Air Fan
RG	Return Grille
RHC	ReHeat Coil
RLA	Running Load Amps
RM	Room
RPM	Revolutions per Minute
S	Supply
SA	Supply Air
SAT	Supply Air Temperature
SD	Supply Diffuser
SEF	Smoke Exhaust Fan
SF (air)	Supply Fan
SF (elect)	Service Factor
SHC	Steam Heating Coil
SP	SetPoint
SPF	Stairwell Pressurization Fan
SP "WC"	Static Pressure resistance measured in inches Of Water Column
SWG	Sidewall Grille
SWR	Sidewall Register
TAB	Testing, Adjusting, and Balancing
TCP	Temperature Control Valve
TP	Traverse Point or Test Point
TSP	Total Static Pressure
TV	Turning Vanes
TYP	Typical
UH	Unit Heater
V	Volt or Voltage
VAV	Variable Air Volume
VD	Volume Damper
VEL	Velocity
VFD	Variable Frequency Drive (electric motor speed controller)
VP	Velocity Pressure
W	Watts
W/	With
WB	Wet Bulb
WG	Water Gauge

Symbol for PSI or pounds per square inch



FINAL AIR BALANCE CO., INC
Testing & Balancing - Industrial & Environmental Systems

S U M M A R Y

No comments



VAV TEST SHEET

JOB NAME: Porter Novelli @ Esquire Plaza 21st floor

SYSTEM: VAV 21-10, VAV 21-11, VAV 21-13

Room No.	Terminal No.	Terminal		Effective Area	Max Design		Max Final		Minimum CFM		Notes
		Type	Size		FPM	CFM	FPM	CFM	Design	Final	
	VAV-21-10		10"								
Server	10-1	CR	10 x 10	FH	FH	400	FH	420			
Office	10-2	CR	10 x 10	FH	FH	225	FH	225			
				Factor = 112		625		645	225	230	
	VAV-21-11		8"								
Office	11-1	CR	10 x 10	FH	FH	450	FH	450			
				Factor = 163		450		450	140	140	
	VAV-21-13		8"								
Office	13-1	CR	8 x 8	FH	FH	225	FH	230			
Office	13-2	CR	8 x 8	FH	FH	225	FH	225			
				Factor = 146		450		455	140	145	

FH = Direct read with flow hood

Factor = Calibration factor

Remarks:
